

S/N 10/789,042



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Kie Y. Ahn et al.	Examiner:	N. Drew Richards
Serial No.:	10/789,042	Group Art Unit:	2815
Filed:	February 27, 2004	Docket:	1303.050US2
Title:	LaAlO <sub>3</sub> FILMS (as amended)		

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**INFORMATION DISCLOSURE STATEMENT**

MS RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications, and Non-Published Applications identifiable by USPTO Serial Number, are no longer required to be provided to the Office. Notification of this change to this effect was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004 and October 19, 2004. Thus, Applicant has not included copies of any US Patents or US Patent Applications identifiable by serial number that may be cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,


KIE Y. AHN ET AL.

By their Representatives,

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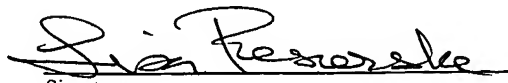
Date 5 January 2007

By

  
David R. Cochran  
Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 5 day of January 2007.

Lisa Posorske  
Name

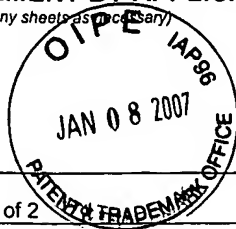
  
Signature

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/789,042
Filing Date	February 27, 2004
First Named Inventor	Ahn, Kie
Group Art Unit	2815
Examiner Name	Richards, N.

Sheet 1 of 2

Attorney Docket No: 1303.050US2

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-20020004276A1	01/10/2002	Ahn, Kie Y., et al.	08/30/2001
	US-20020004277A1	01/10/2002	Ahn, Kie Y., et al.	08/30/2001
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**EXAMINER****DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

<b>Application Number</b>	10/789,042
<b>Filing Date</b>	February 27, 2004
<b>First Named Inventor</b>	Ahn, Kie
<b>Group Art Unit</b>	2815
<b>Examiner Name</b>	Richards, N.

Sheet 2 of 2

Attorney Docket No: 1303.050US2

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
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	US-7,160,577	01/09/2007	Ahn, K. Y., et al.	05/02/2002

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		AHN, "ATOMIC LAYER DEPOSITED DIELECTRIC LAYERS", <u>US Patent Application Serial No. 10/379,470, filed March 4, 2003</u>	
		AHN, KIE Y., et al., "LANTHANIDE YTTRIUM ALUMINUM OXIDE DIELECTRIC FILMS", U.S. Application Serial No. 11/297,567, filed December 8, 2005	
		AHN, KIE Y., et al., "LANTHANUM ALUMINUM OXYNITRIDE DIELECTRIC FILMS", US Application Serial No 11/216474, filed August 31, 2005	
		AHN, KIE Y., et al., "MAGNESIUM TITANIUM OXIDE FILMS", <u>U.S. Application Serial No. 11/189,075, filed July 25, 2005</u>	

**EXAMINER****DATE CONSIDERED**



**S/N 10/789,042**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Kie Y. Ahn et al.	Examiner:	N. D. Richards
Serial No.:	10/789,042	Group Art Unit:	2815
Filed:	February 27, 2004	Docket:	1303.050US2
Title:	LAALO3 FILMS (AS AMENDED)		

**COMMUNICATION CONCERNING RELATED APPLICATIONS**

**MS RCE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related applications in the above-identified patent application:

<u>Serial/Patent No.</u>	<u>Filing Date/Issue Date</u>	<u>Attorney Docket</u>	<u>Title</u>
11496196	July 31, 2006	1303.068US4	MEMORY UTILIZING OXIDE-CONDUCTOR NANOLAMINATES
10443021 6970053	May 22, 2003	1303.137US1	ATOMIC LAYER DEPOSITION (ALD) HIGH PERMEABILITY LAYERED MAGNETIC FILMS TO REDUCE NOISE IN HIGH SPEED INTERCONNECTION
11063132 7154354	February 22, 2005	1303.137US2	HIGH PERMEABILITY LAYERED MAGNETIC FILMS TO REDUCE NOISE IN HIGH SPEED INTERCONNECTION
11197184	August 4, 2005	303.904US1	CONDUCTIVE NANOPARTICLES
11140643	May 27, 2005	1303.141US1	HAFNIUM TITANIUM OXIDE FILMS
11152759	June 14, 2005	1303.144US1	IRIDIUM / ZIRCONIUM OXIDE STRUCTURE
11459792	July 25, 2006	1303.092US2	ZrAlxOy DIELECTRIC LAYERS
11297567	December 8, 2005	1303.157US1	LANTHANIDE YTTRIUM ALUMINUM OXIDE DIELECTRIC FILMS
11297741	December 8, 2005	1303.161US1	HAFNIUM TANTALUM TITANIUM OXIDE FILMS
11427569	June 29, 2006	1303.079US2	LANTHANIDE DOPED TiOX DIELECTRIC FILMS
11493074	July 26, 2006	1303.101US3	LANTHANIDE OXIDE / HAFNIUM OXIDE DIELECTRIC LAYERS
11493112	July 26, 2006	1303.114US2	ZIRCONIUM-DOPED TANTALUM OXIDE FILMS
11457978	July 17, 2006	1303.061US4	ATOMIC LAYER DEPOSITED NANOLAMINATES OF HfO2/ZrO2

## COMMUNICATION CONCERNING RELATED APPLICATIONS

Serial Number: 10/789,042

Filing Date: February 27, 2004

Title: LAALO3 FILMS (AS AMENDED)

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Dkt: 1303.050US2

			FILMS AS GATE DIELECTRICS
11457987	July 17, 2006	1303.061US5	ATOMIC LAYER DEPOSITED NANOLAMINATES OF HfO <sub>2</sub> /ZrO <sub>2</sub> FILMS AS GATE DIELECTRICS
11584229	October 20, 2006	1303.126US2	LANTHANUM HAFNIUM OXIDE DIELECTRICS
11528776	September 28, 2006	1303.130US2	ATOMIC LAYER DEPOSITION OF CeO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> FILMS AS GATE DIELECTRICS
11598437	November 13, 2006	1303.092US3	ATOMIC LAYER DEPOSITED ZIRCONIUM ALUMINUM OXIDE
11566038	December 1, 2006	1303.152US2	LANTHANUM ALUMINUM OXYNITRIDE DIELECTRIC FILMS
11608281	December 8, 2006	1303.114US3	ZIRCONIUM-DOPED TANTALUM OXIDE FILMS
11565826	December 1, 2006	1303.141US2	HAFNIUM TITANIUM OXIDE FILMS
11566042	December 1, 2006	1303.119US2	TITANIUM ALUMINUM OXIDE FILMS
11608286	December 8, 2006	1303.122US2	LANTHANUM ALUMINUM OXIDE DIELECTRIC LAYER

Continuations and divisionals may be later filed on the cases listed above, or cited to the Examiner in any previous Communication Concerning Related Applications. Applicants request that the Examiner review all continuations and divisionals of the above-listed or previously-cited patent applications before allowing the claims of the present patent application.

Respectfully submitted,  
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By Applicants' Representatives,  
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(612) 371-2157

Date 5 January 2007 By David R. Cochran  
David R. Cochran  
Reg. No. 46,632

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 5 day of January, 2007.

USA Postmark  
Name

Susan R. Power  
Signature